



# 2017 Alternative Manure Management Program (AMMP)

NILAN WATMORE, MSC  
ENVIRONMENTAL SCIENTIST

2/5/18 | Sub Group #1: Fostering markets for non-digester projects



# 2017 AMMP General Information

## 17 projects awarded\*

- \$9.64 million\* in awarded funds
- \$2.7 million in-kind/match
- 365,476 total mtCO<sub>2</sub>e reduction over 5 years
- Herd size ranging from ~250 to 7,000\*\*

\*Subject to change

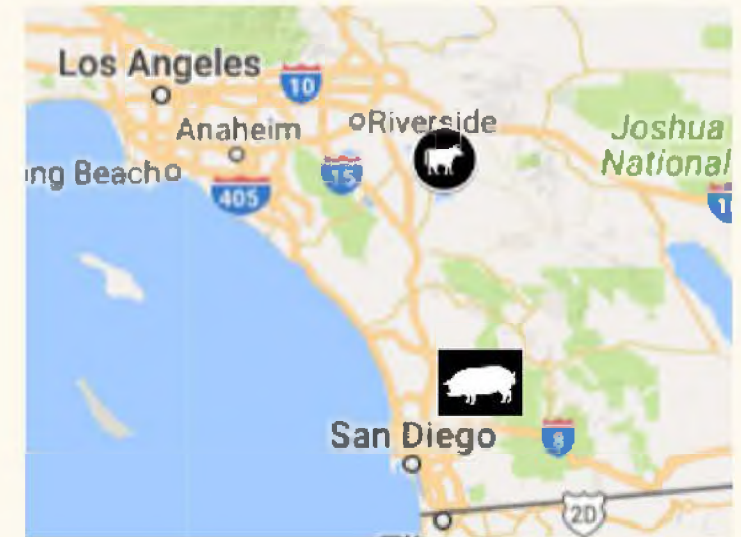
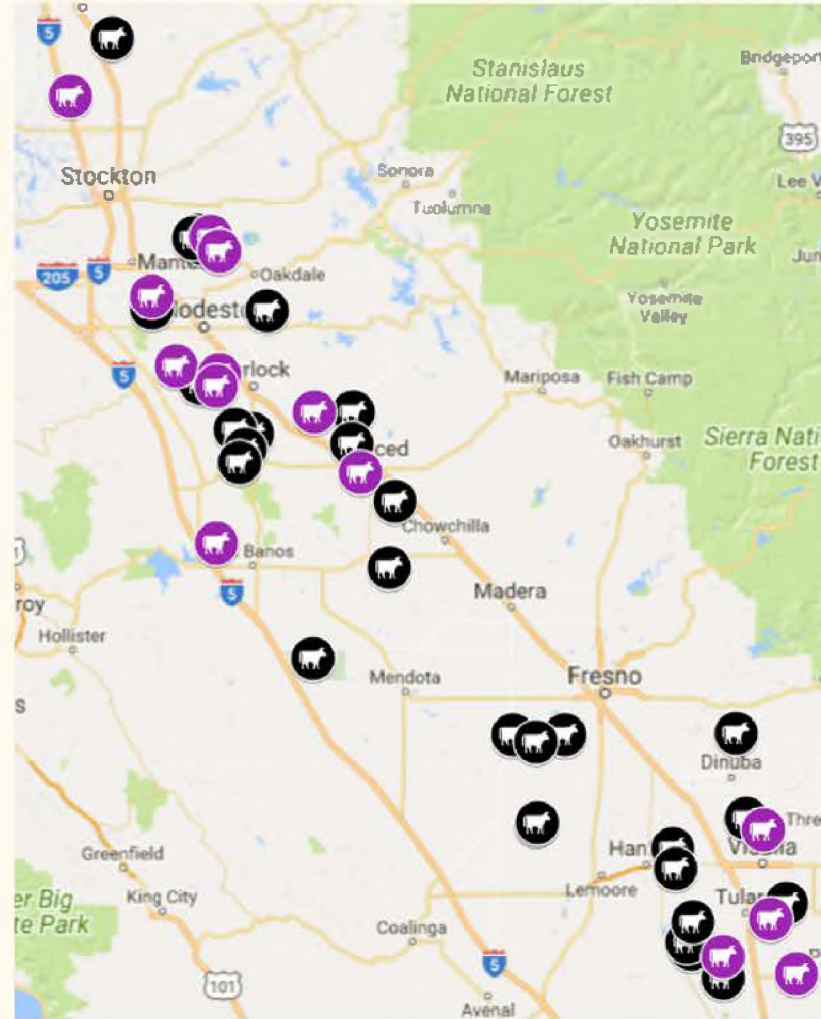
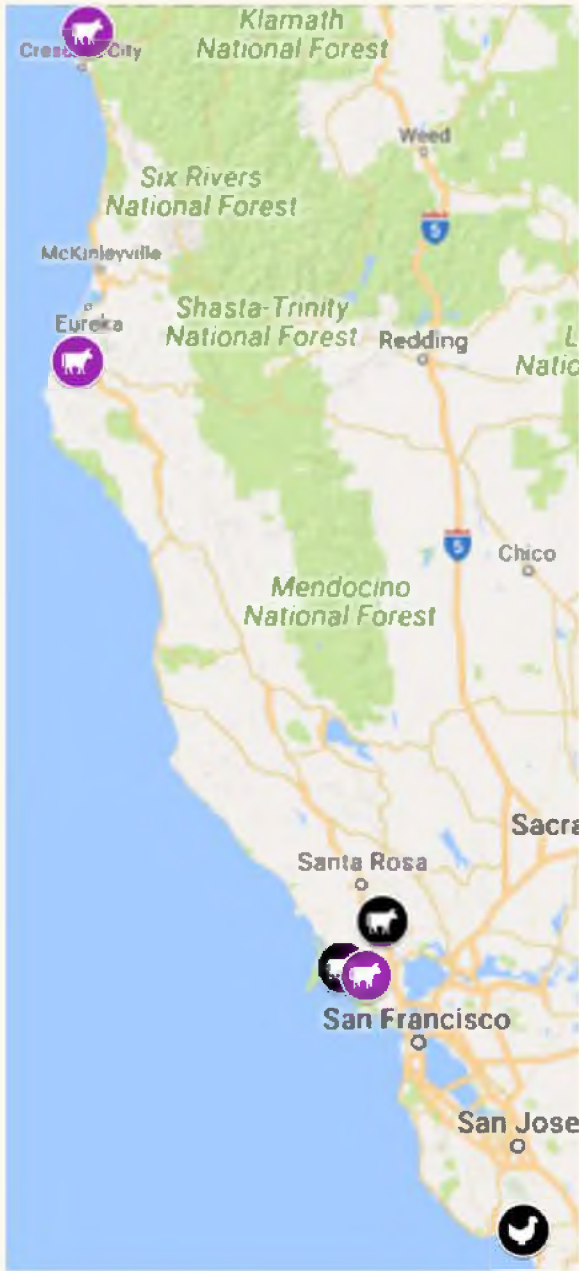
\*\*Herd size not a factor in project selection.

## 53 applicants

- \$29.5 million in requested funds
- \$5.7 million in-kind/match
- 906,017 total mtCO<sub>2</sub>e reduction over 5 years
- Herd size ranging from ~225 to 8,800



# Applications by Location\*



-  **North Coast**  
6 applicants | 3 awarded 
-  **Central Valley**  
45 applicants | 14 awarded 
-  **Southern California**  
2 applicants | 0 awarded

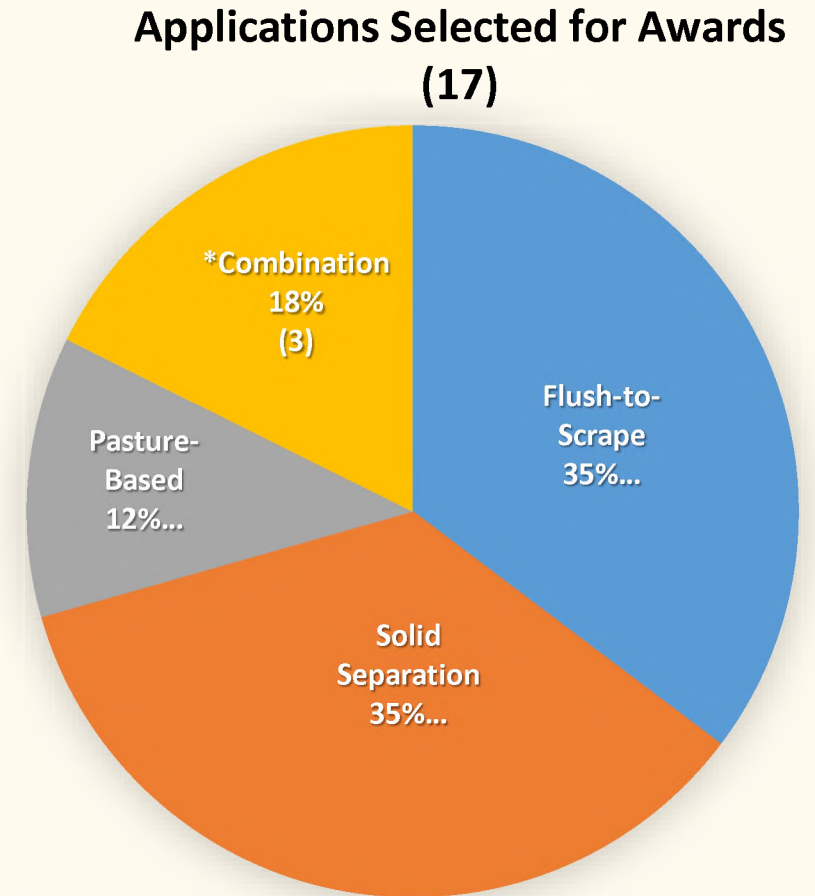
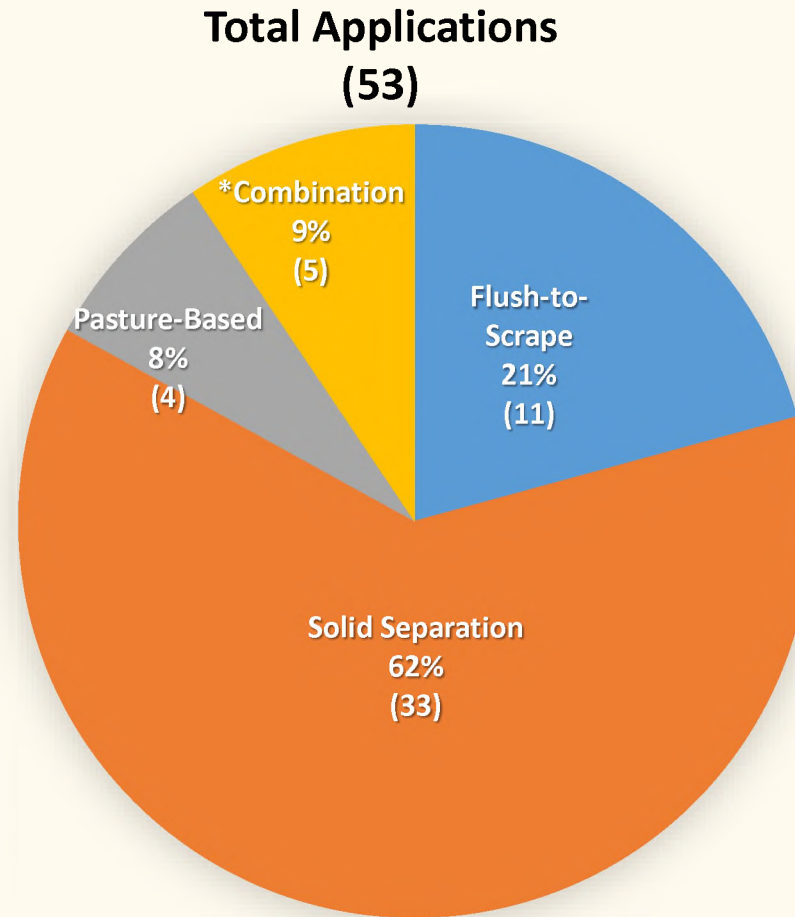
\*Project location not a factor in project selection.

[cdfa.ca.gov/oefi/ammp](https://cdfa.ca.gov/oefi/ammp)

# AMMP Applications by Practice\*

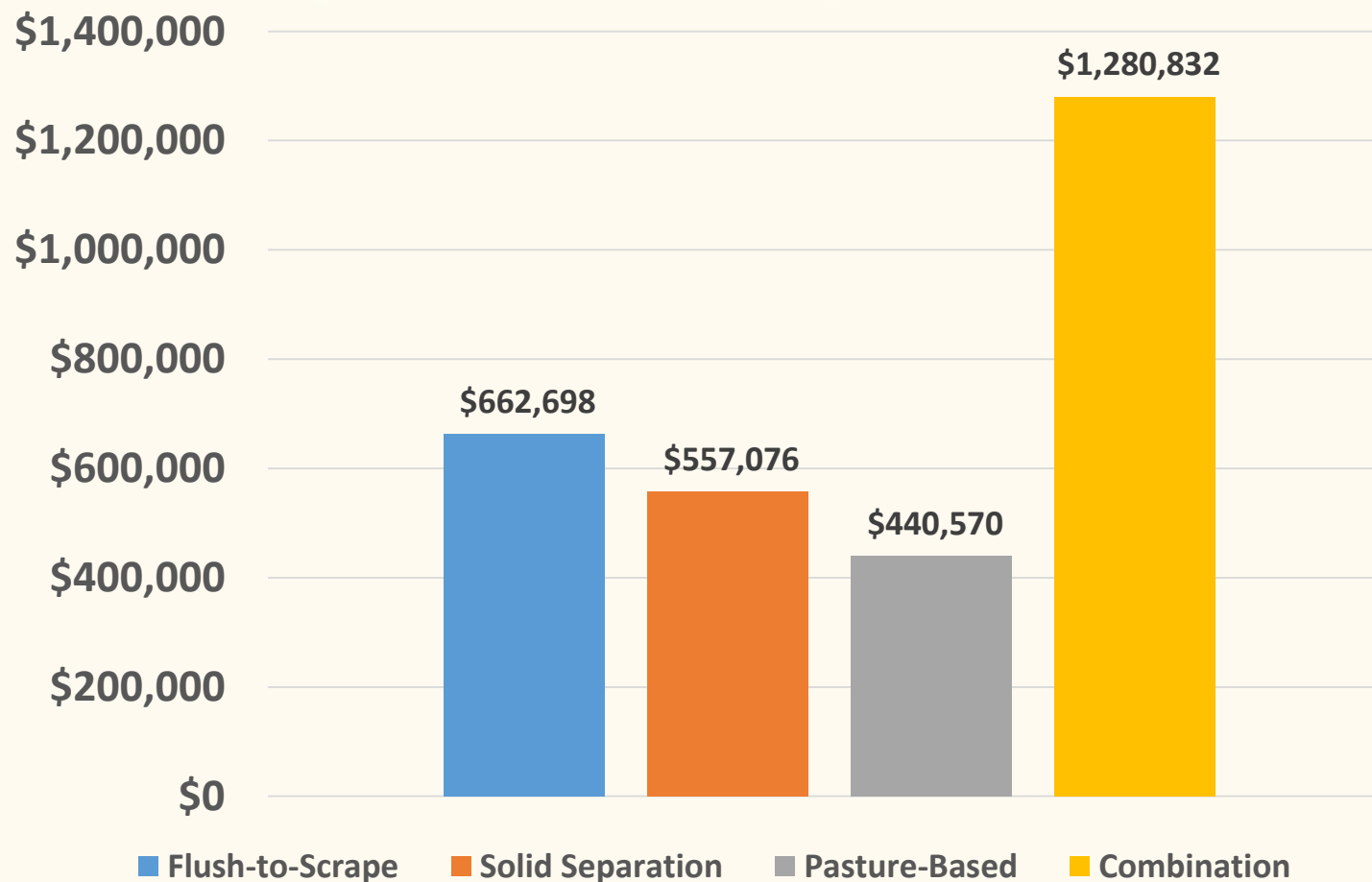
Eligible Practices include:

- A) **Pasture-Based** (conversion to pasture, increased time at pasture or compost bedded pack barn)
- B) **Flush-to-Scrape** (with some form of drying or composting)
- C) **Solid Separation** (with some form of drying or composting)



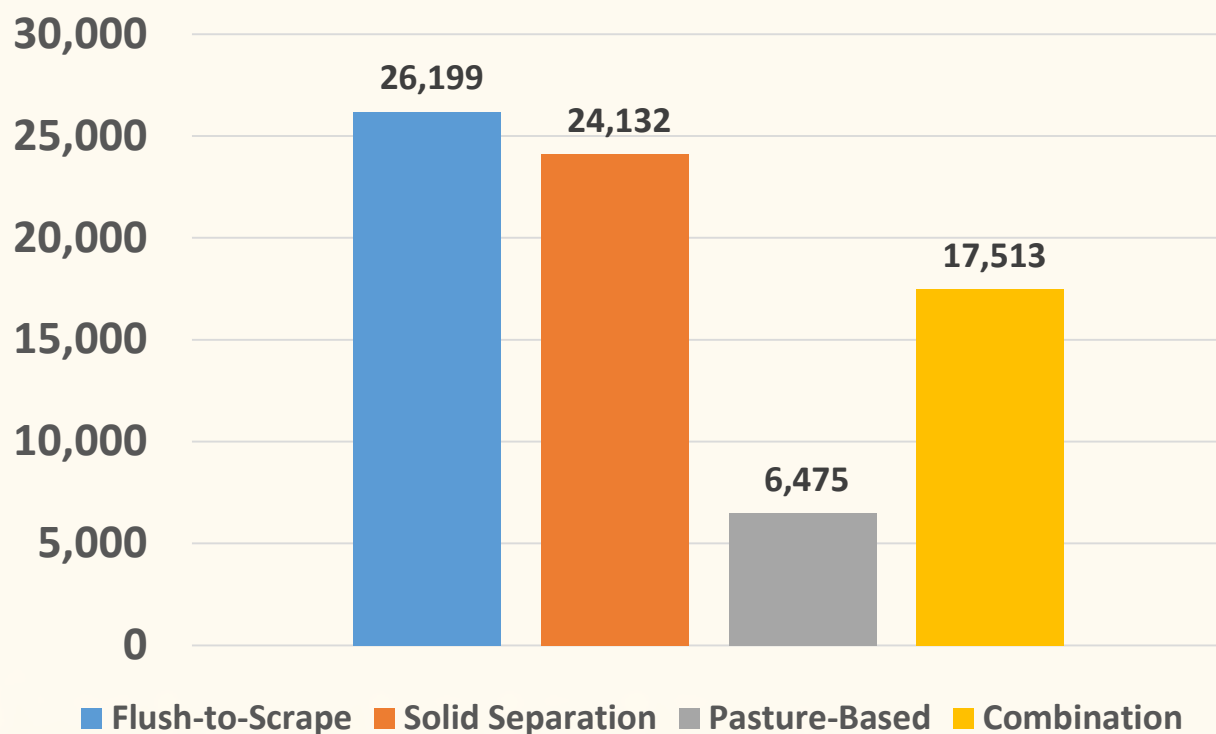
\*Combination = Proposals with combined practices include AB and BC

# Average Total Cost per Practice (Awarded Projects)

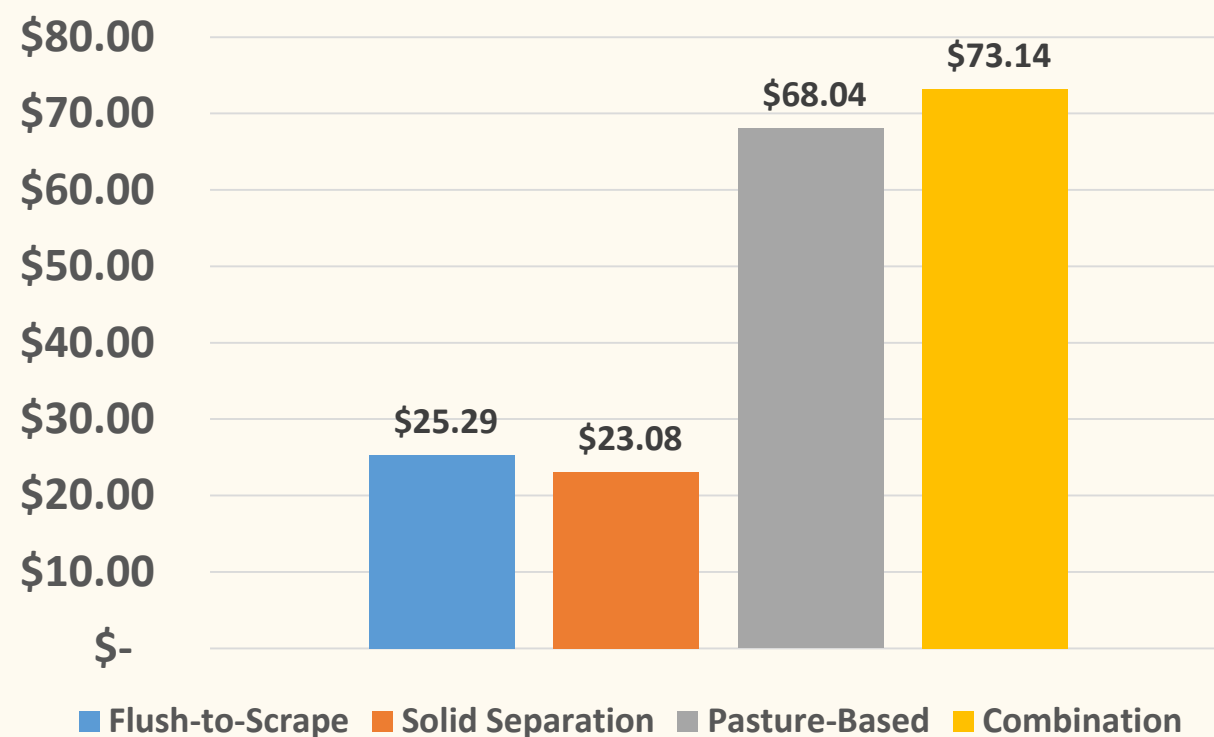


# Average GHG Reduction (5-years; Awarded Projects)\*

## Average GHG Reduction per Practice (mtCO<sub>2</sub>e)



## Average Cost per ton CO<sub>2</sub>e per Practice



\*Submitted by applicant/not actual reductions



# Application Scoring and Selection for Funding

## 35 points – GHG Reduction

- 10 points – described reduction
- 10 points – completed QM and justified assumptions if defaults were changed
- 15 points (5 each) for:
  - Reductions over 5 years
  - GHG per ECM and/or animal
  - GHG per \$ AMMP/GGRF requested

## 25 points – Project Plan & Long-Term Viability

## 15 points – Budgets & Financials

## 10 points – Project Readiness

## 10 points – Environmental Benefits

## 5 points – Benefits to Disadvantaged and Low-Income Communities







# Challenges and Opportunities: Applications

## Not an eligible practice

- Use of non-commercial, proprietary technology
- Demonstration projects
- Proposed projects resulted in increased baseline emissions
- Proposed projects had existing manure handled in dry conditions

## QM tool

- Completed incorrectly resulting in manure collection exceeding 100% and/or negative emissions (increase of baseline)
- Change of default values without proper justification

## Project Narrative

- Inadequate information provided to assess how proposed project would be implemented relative to existing management practices



# Challenges and Opportunities

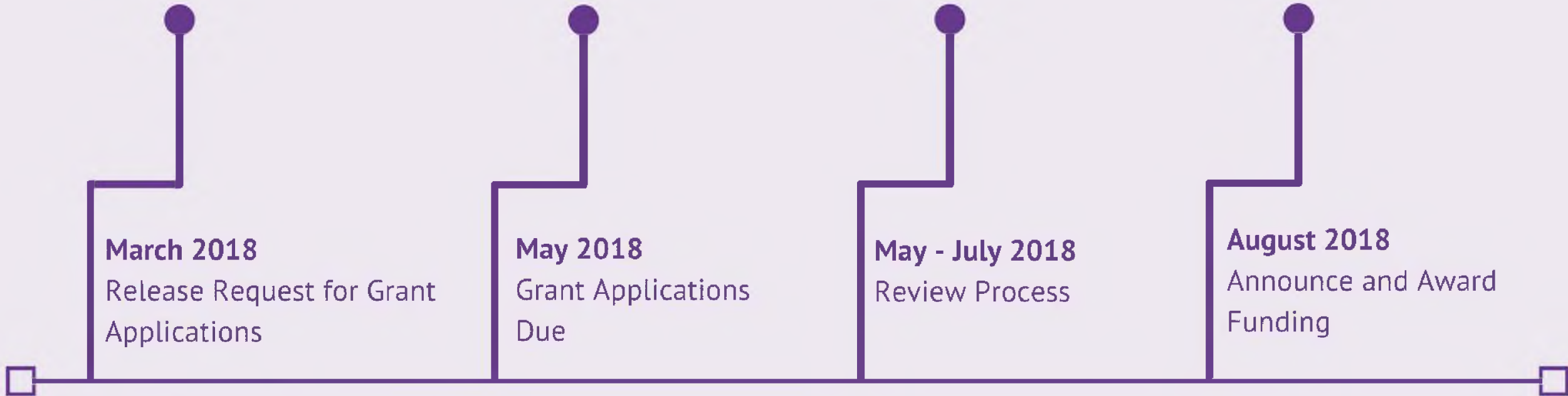
## Technical Assistance Providers

- **Technical Assistance**
- 6 Technical Assistance Providers held 21 total workshops
- 134 total attendees with 20 getting additional assistance
- **Application submission period**
- Timeline for submission was insufficient
- Permits
- Project Design

## CDFA

- **Application submission period**  
GGRF encumbrance deadlines
- **Technical Assistance**  
Limited expertise
- **Analytical tools and techniques for measurement of actual GHG reductions**

# Next Round of AMMP\*



\*Timeline subject to change

**\$19 – 33 million** available for 2018